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CLAIMS

What is claimed is:

A home server comprising:

2	a personalization engine to create personal preference information from a user		
3	regarding a content, the personal preference information being represented in a		
4	description compatible with a content analyzer in an edge server; and		
5	a content scheduler coupled to the personalization engine to schedule delivery		
6	of the content from the edge server and uploading of the personal preference		
7	information to the edge server.		
1	The home server of claim 1 further comprising:		
2	a local storage to cache the content delivered from the edge server; and		
3	a content manager coupled to the local storage to manage the cached content.		

- 3. The home server of claim 1 wherein the description is compatible with a metadata associated with the content.
- 4. The home server of claim 3 wherein the metadata is one of a closed caption, a Resource Description Framework (RDF), motion picture expert group (MPEG)-7, TV-Anytime metadata, a Society of Motion Picture and Television Engineers (SMPTE) metadata dictionary, a Dublin Core descriptor, and an European Broadcasting Union (EBU) P/meta.
- $1 \hspace{1cm} \textbf{5.} \hspace{1cm} \textbf{The home server of claim 1 wherein the personalization engine} \\ 2 \hspace{1cm} \textbf{comprises:}$
- $\begin{array}{lll} 3 & & \text{a deduction engine to deduce the personal preference information based on} \\ 4 & & \text{user's usage.} \end{array}$
- 1 6. The home server of claim 1 wherein the personalization engine 2 comprises:
- an input interface to obtain the personal preference information provided by the user.

1	7. The home server of claim 2 wherein the content manager comprises:		
2	a retriever to retrieve the cache content;		
3	an indexer to index the cache content; and		
4	a distributor to distribute the retrieved cache content to a device.		
1	8. The home server of claim 7 wherein the content manager further		
2	comprises:		
3	a decryptor to decrypt the cache content; and		
4	an archiver to archive the cached content.		
1	9. The home server of claim 7 wherein the device is one of a viewing		
2	device, a personal digital assistant (PDA), an audio visual device, a tablet, a personal		
3	computer, a set-top box, a digital television set, and a wireless device.		
1	10. An edge server comprising:		
2	a content analyzer to analyze a content received from a media source based on a		
3	description compatible with personal preference information from a user regarding the		
4	content, the personal preference information being provided by a home server; and		
5	a content filter coupled to the content analyzer to filter the content according to		
6	the personal preference information for delivery to the user.		
1	11. The edge server of claim 10 further comprising:		
2	a content assembler to assemble the filtered content using the description into a		
3	packaged content according to an assembly criterion; and		
4	a content distributor coupled to the content assembler to distribute the packaged		

1 12. The edge server of claim 10 wherein the media source is one of a Web
2 content, a television broadcast, a media broadcast, a video program, an audio program,
3 and an audio visual program.

content to the user based on delivery information provided by the home server.

1 13. The edge server of claim 10 wherein the description is compatible with a metadata associated with the content.

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 The edge server of claim 13 wherein the metadata is one of a cl 	osed
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- 2 caption, a Resource Description Framework (RDF), motion picture expert group
- 3 (MPEG)-7, a TV-Anytime metadata, a Society of Motion Picture and Television
- 4 Engineers (SMPTE) metadata dictionary, a Dublin Core descriptor, and an European
- 5 Broadcasting Union (EBU) P/meta.
- 1 15. The edge server of claim 10 wherein the assembly criterion is one of a 2 semantic topic and a subscription level.
- 1 16. The edge server of claim 10 wherein the delivery information includes at 2 least a scheduled time, a quality of service information, and a transmission bandwidth.
- 1 17. The edge server of claim 13 wherein the content analyzer comprises: 2 a parser to parse the metadata.
- 1 18. The edge server of claim 10 wherein the content analyzer comprises:
 2 a metadata creator to create a metadata associated with the content.
 - The edge server of claim 10 wherein the content filter comprises:
 a matcher to match the description with the personal preference information.
- 1 20. A method comprising:
 - creating personal preference information from a user regarding a content, the personal preference information being represented in a description compatible with a content analyzer in an edge server; and
- scheduling delivery of the content from the edge server and uploading of the
 personal preference information to the edge server.
- 1 21. The method of claim 20 further comprising:
- 2 caching the content delivered from the edge server; and
- 3 managing the cached content.
- 1 22. The method of claim 20 wherein the description is compatible with a 2 metadata associated with the content.

1	23. The method of claim 22 wherein the metadata is one of a closed caption,
2	a Resource Description Framework (RDF), motion picture expert group (MPEG)-7,
3	TV-Anytime metadata, a Society of Motion Picture and Television Engineers (SMPTE)
4	metadata dictionary, a Dublin Core descriptor, and an European Broadcasting Union
5	(EBU) P/meta.

- 1 24. The method of claim 20 wherein creating personal preference 2 information comprises:
- 3 deducing the personal preference information based on user's usage.
- 1 25. The method of claim 20 wherein creating personal preference information comprises:
- 3 obtaining the personal preference information provided by the user.
 - 26. The method of claim 21 wherein scheduling delivery comprises:
- retrieving the cache content;
 indexing the cache content; and
- mdexing the eache content, and
 - distributing the retrieved cache content to a device.
- The method of claim 26 wherein scheduling delivery further comprises:
 decrypting the cache content; and
 archiving the cached content.
- The method of claim 26 wherein the device is one of a viewing device, a personal digital assistant (PDA), an audio visual device, a tablet, a personal computer, a set-top box, a digital television set, and a wireless device.
 - A method comprising:
- analyzing a content received from a media source based on a description
 compatible with personal preference information from a user regarding the content, the
 personal preference information being provided by a home server; and
- 5 filtering the content according to the personal preference information for 6 delivery to the user.

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1		30.	The method of claim 29 further comprising:
2		asser	abling the filtered content using the description into a packaged content
3	accor	ding to	an assembly criterion; and
4		distri	buting the packaged content to the user based on delivery information
5	provi	ded by	the home server

- 1 31. The method of claim 29 wherein the media source is one of a Web
 2 content, a television broadcast, a media broadcast, a video program, an audio program,
 3 and an audio visual program.
- 1 32. The method of claim 29 wherein the description is compatible with a metadata associated with the content
 - 33. The method of claim 32 wherein the metadata is one of a closed caption, a Resource Description Framework (RDF), motion picture expert group (MPEG)-7, a TV-Anytime metadata, a Society of Motion Picture and Television Engineers (SMPTE) metadata dictionary, a Dublin Core descriptor, and an European Broadcasting Union (EBU) P/meta.
- 1 34. The method of claim 29 wherein the assembly criterion is one of a 2 semantic topic and a subscription level.
- The method of claim 29 wherein the delivery information includes at least a scheduled time, a quality of service information, and a transmission bandwidth.
- 1 36. The method of claim 32 wherein analyzing comprises: 2 parsing the metadata.
- 1 37. The method of claim 29 wherein analyzing comprises: 2 creating a metadata associated with the content.
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- 1 38. The method of claim 29 wherein filtering comprises:
 2 matching the description with the personal preference information.

3 user.

1	39.	A system comprising:	
2	a media source to provide a media content;		
3	an edge server connected to a network; and		
4	a home server coupled to the edge server via the network, the home sever		
5	comprising:		
6		a personalization engine to create personal preference information from	
7		a user regarding a content, the personal preference information being	
8		represented in a description compatible with a content analyzer in the	
9		edge server; and	
10		a content scheduler coupled to the personalization engine to schedule	
11		delivery of the content from the edge server and uploading of the	
12		personal preference information to the edge server.	
1	40.	The system of claim 39 further comprising:	
2	a local storage to cache the content delivered from the edge server; and		
3	a cont	ent manager coupled to the local storage to manage the cached content.	
1	41.	The system of claim 39 wherein the description is compatible with a	
2	metadata asso	ciated with the content.	
1	42.	The system of claim 41 wherein the metadata is one of a closed caption,	
2	a Resource Description Framework (RDF), motion picture expert group (MPEG)-7,		
3	TV-Anytime	metadata, a Society of Motion Picture and Television Engineers (SMPTE)	
4	metadata dictionary, a Dublin Core descriptor, and an European Broadcasting Union		
5	(EBU) P/meta	ı.	
1	43.	The system of claim 39 wherein the personalization engine comprises:	
2		action engine to deduce the personal preference information based on	
3	user's usage.		
1	44.	The system of claim 39 wherein the personalization engine comprises:	

an input interface to obtain the personal preference information provided by the

1	45.	The system of claim 40 wherein the content manager comprises:	
2	a retriever to retrieve the cache content;		
3	an indexer to index the cache content:		
4	a dist	ributor to distribute the retrieved cache content to a device.	
1	46.	The system of claim 45 wherein the content manager further comprises:	
2	a decryptor to decrypt the cache content; and		
3	an arc	chiver to archive the cached content.	
1	47.	The system of claim 45 wherein the device is one of a viewing device, a	
2	personal digital assistant (PDA), an audio visual device, a tablet, a personal computer,		
3	set-top box, a	a digital television set, and a wireless device.	
1	48.	A system comprising:	
2	a med	lia source to provide a media content;	
3	a hon	ne server connected to a network; and	
4	an ed	ge server coupled to the home server via the network, the edge server	
5	comprising:		
6		a content analyzer to analyze a content received from a media source	
7		based a description compatible with personal preference information	
8		from a user regarding the content, the personal preference information	
9		being provided by a home server; and	
10		a content filter coupled to the content analyzer to filter the content	
11		according to the personal preference information for delivery to the user.	
1	49.	The system of claim 48 further comprising:	
2	a cont	ent assembler to assemble the filtered content using the description into a	
3	packaged con	tent according to an assembly criterion; and	
4	a content distributor coupled to the content assembler to distribute the packaged		
5	content to the user based on delivery information provided by the home server.		

50. The system of claim 48 wherein the media source is one of a Web
 content, a television broadcast, a media broadcast, a video program, an audio program,
 and an audio visual program.

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- 1 51. The system of claim 48 wherein the description is compatible with a metadata associated with the content.
- The system of claim 51 wherein the metadata is one of a closed caption,
 a Resource Description Framework (RDF), motion picture expert group (MPEG)-7, a
- 3 TV-Anytime metadata, a Society of Motion Picture and Television Engineers (SMPTE)
- $4 \mathrm{metadata}$ dictionary, a Dublin Core descriptor, and an European Broadcasting Union
- 5 (EBU) P/meta.
- 1 53. The system of claim 48 wherein the assembly criterion is one of a semantic topic and a subscription level.
- The system of claim 48 wherein the delivery information includes at least a scheduled time, a quality of service information, and a transmission bandwidth.
 - 55. The system of claim 51 wherein the content analyzer comprises: a parser to parse the metadata.
 - 56. The system of claim 48 wherein the content analyzer comprises: a metadata creator to create a metadata associated with the content.
- 57. The system of claim 48 wherein the content filter comprises:
 a matcher to match the description with the personal preference information.